CITY OF LIVE OAK

August 26, 2010

Mr. David Kirn, P.E.
California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

RE: City of Live Oak's Comments on Tentative Waste Discharge Requirements Order (Renewal of NPDES Permit No. CA0079022) and Amended Cease and Desist Order

Dear Mr. Kirn:

The purpose of this letter is to submit comments regarding the Tentative Waste Discharge Requirements Order for the City of Live Oak (City) Wastewater Treatment Plant (WWTP) (Tentative Permit). Detailed comments are provided on the City's major issues of concern. To address these major issues of concern, which will impact multiple sections of the Tentative Permit, the City has included detailed discussions regarding the designation of beneficial uses of the receiving water, receiving water limits for temperature, a detailed discussion related to the calculation of water quality-based effluent limitations for hardness dependent metals, and other identified issues. Other specific comments related to the Tentative Permit are provided in the attached table (Attachment A).

I. Application of MUN Beneficial Use to Reclamation District 777 Lateral Drain No. 1[1] Is Inappropriate

The Tentative Permit applies the municipal and domestic supply (MUN) beneficial use designation to Reclamation District 777 (RD 777) Lateral Drain No. 1 (Lateral Drain No. 1) based on the Central Valley Regional Water Quality Control Board's (Central Valley Water Board) incorporation of the State Water Resources Control Board's (State Water Board) "Sources of Drinking Water Policy" (Resolution 88-63) in the *Water Quality Control Plan for*

[1] As indicated in the Report of Waste Discharge, the City is in the process of potentially changing its discharge location from Lateral Drain No. 1 to Lateral Drain No. 2. The discharge locations are near each other and all of the arguments provided here to Lateral Drain No. 1 apply equally to Lateral Drain No. 2.

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the Sacramento and San Joaquin River Basins (4th ed. 1998) (Basin Plan). Although the State Water Board's Drinking Water Policy includes a specific exception for systems designed or modified for the primary purpose of conveying or holding agricultural drainage waters, the Central Valley Water Board contends within the Tentative Permit that a Basin Plan amendment is necessary to apply the exception contained in Resolution 88-63. The City disagrees with the application of Resolution 88-63 to Lateral Drain No. 1 and the proposed conclusion in the Tentative Permit for several reasons.

A. The State Water Board's Adoption of Resolution 88-63 Was Invalidated by the Office of Administrative Law and Is Not a Legal Policy

As a preliminary matter, the State Water Board's adoption of Resolution 88-63 was invalidated by the Office of Administrative Law (OAL), and therefore the Central Valley Water Board's incorporation of the invalidated policy is also invalid. In 1986, the voters passed Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986. (Health & Saf. Code, § 25249.5 et seq.; Cal. Code Regs., tit. 27, § 27001 et seq.) Among other things, Proposition 65 prohibits business activities releasing certain chemicals that pass into a source of drinking water. (Health & Saf. Code, § 25249.5.) It defines "source of drinking water" as "either a present source of drinking water which is identified or designated in a water quality control plan adopted by a regional board as being suitable for domestic or municipal uses." (Health & Saf. Code, § 25249.11(d).) The State Water Board passed Resolution 88-63 in an effort to clarify Proposition 65's reference to "sources of drinking water" for purposes of enforcement of that statute. Resolution 88-63 provides that, with the exception of certain specified waters such as agricultural conveyance facilities, all surface and ground waters of the state are considered to be suitable, or potentially suitable, for municipal or domestic water supply.

Resolution 88-63, however, ran afoul of the California Administrative Procedure Act (APA). (Gov. Code, §§ 11346-11346.8.) More specifically, regulations adopted by an agency must be submitted to the OAL. (Gov. Code, § 11349.1(a).) If the OAL disapproves the regulation, it is sent back to the adopting agency. (*Id.* at § 11349.3(b).) It is unlawful for an agency to apply a regulation that has not been approved by the OAL: "No state agency shall issue, utilize, enforce, or attempt to enforce any guideline, criterion, bulletin, manual, instruction, order, standard of general application, or other rule, which is a regulation as defined in Section 11342.600, unless the guideline, criterion, bulletin, manual, instruction, order, standard of general application, or other rule has been adopted as a regulation and filed with the Secretary of State pursuant to this chapter." (Gov. Code, § 11340.5(a).)

OAL Determination No. 8 held that Resolution 88-63 was a "regulation" subject to the APA, and its adoption violated Government Code section 11347.5 (now § 11340.5) because the State Water Board failed to adopt this rule in compliance with the APA. (OAL Determination No. 8, California Regulatory Notice Register at pp. 1586, 1603, Attachment 1.) Thus, Resolution 88-63 was invalidated and could not lawfully be applied by any agency. Nonetheless,

the Central Valley Water Board incorporated that Resolution into the Basin Plan and the State Water Board approved that Basin Plan amendment. Now, for the first time ever, the Central Valley Water Board intends to apply Resolution 88-63 in the City's Tentative Permit, finding MUN to be a regulatory beneficial use of Lateral Drain No. 1, and imposing MUN-based effluent limits.

However, it is unlawful for the Central Valley Water Board to use Resolution 88-63 in any fashion. (Gov. Code, § 11340.5(a).) And, any MUN use based upon this designation pursuant to Resolution 88-63 is legally infirm and invalid.

In other proceedings, the Central Valley Water Board has asserted that they may use this unlawful regulation by claiming Resolution 88-63 was exempted from the APA. The law provides that basin plans or amendments enacted after June 1, 1992, must comply with the APA, but that then-existing and uncontested plans were exempt from the APA. (Gov. Code, § 11353.) Of course, OAL Determination No. 8 was issued on May 17, 1989, long before the 1992 APA amendments. By 1992, the OAL had already held that Resolution 88-63 was invalid.

Thus, the Central Valley Water Board's incorporation of Resolution 88-63 cannot lawfully be held to have designated the MUN beneficial use in otherwise undesignated streams like Lateral Drain No. 1. Because the Central Valley Water Board is relying upon an invalidated regulation as the basis for its MUN designation of Lateral Drain No. 1, any MUN use designated pursuant to Resolution 88-63 is invalid.

B. Agricultural Drains Are Not Designated by Resolution 88-63 or the Central Valley Water Board's Incorporation Thereof

Even if Resolution 88-63 is determined to be valid, constructed agricultural drains are not designated by the policy. The language of Resolution 88-63 clearly states that regional boards should designate "[a]ll surface and ground waters of the State [] considered to be suitable, . . . for municipal or domestic water supply . . . with the exception of: . . . 2. Surface waters where: . . . b. [t]he water is in systems designed or modified for the primary purpose of conveying or holding agricultural drainage waters, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards." (Resolution 88-63 at pp. 1-2.) In other words, the State Water Board specifically directed the regional boards to so designate, except for those waters of the state that fell within the exceptions of the policy.

Further, in a memorandum to Central Valley Water Board staff in 1994, Senior Staff Counsel from the State Water Board advised Central Valley Water Board staff that constructed agricultural drains, "and certain other collection and treatment systems which are described in the Policy," are excepted from the MUN designation via Resolution 88-63, as incorporated into the Basin Plan. (Memorandum to Dennis Westcot from Elizabeth Miller Jennings (Mar. 3, 1994) at p. 2, Attachment 2.) The memorandum specifically states, "[t]he designation of beneficial

uses in constructed agricultural drains is not covered by either the tributary footnote or the Sources of Drinking Water Policy." (*Id.* at p. 3.)

The State Water Board's decision in Order WQO 2002-0015, "In the Matter of Review on Own Motion . . . for Vacaville's Easterly Wastewater Treatment Plant" (Oct. 3, 2002) (Vacaville Order), does not contradict the conclusions expressed by Ms. Jennings in the 1994 memorandum. In the Vacaville Order, the State Water Board found Old Alamo Creek to be designated as MUN through Resolution 88-63; however, it also found that the exception categories did not apply to Old Alamo Creek. (Vacaville Order at p. 28, Attachment 3.) Specifically, Old Alamo Creek was not designed or modified to be an agricultural drain. (*Ibid.*) Thus, the State Water Board's Vacaville Order does not opine on the issue with respect to the designation of MUN to constructed agricultural drains that fit within the exception language of Resolution 88-63.

Because the language of Resolution 88-63 provided specific exclusions for constructed agricultural drains, the Central Valley Water Board's incorporation by reference thereof could not have designated such drains as MUN because they were not in the class of water bodies to be considered for designation.

C. If the Central Valley Water Board's Incorporation of Resolution 88-63 Includes the Exceptions, the Exceptions Are Self-Executing

In the alternative, if the Central Valley Water Board's incorporation by reference is found to include the exceptions and the types of water bodies for which the exceptions would apply, then the Central Valley Water Board's incorporation of Resolution 88-63 must have included the exceptions as self-executing provisions. In that case, Basin Plan amendments are not required to apply the exceptions. The Basin Plan specifically states:

> Water Bodies within the basins that do not have beneficial uses designated in [the Basin Plan] are assigned MUN designations in accordance with the provisions of State Water Board Resolution No. 88-63 which is, by reference, a part of this Basin Plan. . . . These MUN designations in no way affect the presence or absence of other beneficial use designations in these water bodies. (Basin Plan at p. II-2.01.)

In the Vacaville Order, the State Water Board concluded that the Central Valley Water Board's incorporation of Resolution 88-63, and in particular the "in accordance" language, meant that, in the Central Valley Basin Plan, the Central Valley Water Board actually assigned the MUN beneficial use to all unidentified water bodies. (Vacaville Order at p. 27.) As discussed previously, the Vacaville Order does not specifically state that the Central Valley Water Board's blanket designation included water bodies that fell within the exceptions. If the Vacaville Order is interpreted as such, then the Central Valley Water Board's interpretation and the State Water Board's conclusion fail to interpret the Basin Plan according to the general rules of construction. A Basin Plan is a quasi-legislative regulation (*State Water Resources Control*

Bd. v. Office of Administrative Law (1993) 12 Cal.App.4th 697, 701-702) and, like any other regulation, must be interpreted according to the standard rules of construction. Among those rules is the rule promoting an interpretation that will give each word meaning and not render language superfluous. "Significance should be given, if possible, to every word of an act. [Citations omitted.] Conversely, a construction that renders a word surplusage should be avoided. [Citations omitted.]" (*Delaney v. Superior Court (Kopetman)* (1990) 50 Cal.3d 785, 798-799.)

The language in question consists of four paragraphs that must be read collectively and harmonized. In summary, the first paragraph sets up the general application of beneficial use designations through the tributary statement, but qualifies that statement's application by stating that the Central Valley Water Board's judgment will be applied where the beneficial uses may not be applicable. The second paragraph further explains that it is impractical to list every water body and that "[f]or unidentified water bodies, the beneficial uses will be evaluated on a case-by-case basis." (Basin Plan at p. II-2.00.) Next, the language references the Central Valley Water Board's incorporation of Resolution 88-63 and assigns MUN beneficial uses "in accordance" with Resolution 88-63. Finally, the last paragraph states, "[i]n making any exemptions to the beneficial use designation of MUN, the Regional Board will apply the exceptions listed in Resolution 88-63 []." (*Id.* at p. II-2.01.)

This language plainly establishes the Basin Plan's intended process for designating beneficial uses (e.g., "MUN" for drinking-water supplies) for water bodies not specifically identified in the Basin Plan. This language explicitly requires the Central Valley Water Board to evaluate the application of beneficial uses on a case-by-case basis for undesignated water bodies and designate unidentified water bodies with the "MUN" beneficial use only in accordance with Resolution 88-63. (Basin Plan at p. II 2.00.) Resolution 88-63, as adopted by the State Water Board, directs the regional boards to consider all surface waters to be suitable for the MUN beneficial use except where, "[t]he water is in systems designed or modified for the primary purpose of conveying or holding agricultural drainage waters, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards." (Resolution 88-63, at p. 2, other exceptions omitted.) In adopting Resolution 88-63, the State Water Board thus expressly recognized the problem later created by the Vacaville Order and expressly directed the regional boards not to apply the "MUN" beneficial use to agricultural drainage facilities. To comply with this direction, the Central Valley Water Board explicitly incorporated language into the Basin Plan that states, "the Regional Board will apply the exceptions listed in Resolution 88-63." (Basin Plan at p. II-2.01.)

The Tentative Permit, however, ignores the impact and significance of this language. In fact, the State Water Board's Vacaville Order fails to discuss at all the application and impact of the specific Basin Plan language that states the Central Valley Water Board will apply the exceptions from Resolution 88-63. The Tentative Permit also fails to recognize that the literal reading of "in accordance" with Resolution 88-63 means that the exceptions in the policy were incorporated into the Basin Plan and thus require that the Central Valley Water Board not assign

the "MUN" beneficial use designation to water bodies that fit within Resolution 88-63's exceptions. The Central Valley Water Board and State Water Board's collective interpretations of the Central Valley Basin Plan thus render those exceptions surplusage in contradiction of standard rules of construction.

As applied in the Tentative Permit, the Central Valley Water Board's interpretation of the Basin Plan also contradicts the rule of construction that interpretations of laws and rules not create absurd results. (See, e.g., *People v. Valtakis* (2003) 105 Cal.App.4th 1066, 1076.) This consideration applies particularly where an interpretation of law could cause institutions to be overburdened to the point of breaking down. (See *City of Orange v. San Diego County Employees Retirement Assn.* (2002) 103 Cal.App.4th 45, 55.) Based on the Central Valley Water Board's interpretation of the Basin Plan as applying the "MUN" beneficial use designation to all Central Valley water bodies, the City must now either pursue a Basin Plan amendment to apply the exception specifically identified in the State Water Board's policy, or install new treatment that will cost the City's ratepayers millions of dollars on top of the $20 million already spent to comply with Order No. R5-2004-0096. The Central Valley Water Board cannot justify the enormous burden that this approach would foist on the City and its ratepayers in light of the nature of the facilities in question and the fact that the State Water Board (as evinced by its express words in Resolution 88-63) never intended for such facilities to be regulated as a drinking water source.

D. The Implementation Language in the Basin Plan Contradicts the State's Policy and Is Invalid

The Tentative Permit relies on language in the Implementation Chapter of the Basin Plan to support the premise that the Central Valley Water Board must adopt a Basin Plan amendment to apply an exception that is specifically identified in Resolution 88-63. (Tentative Permit at p. F-15; Basin Plan at p. IV-9.00.) However, the language identified (and as included in the Implementation Chapter of the Basin Plan) directly contradicts Resolution 88-63 and is therefore invalid as adopted into the Basin Plan and as applied here. As indicated previously, the Central Valley Water Board was required by Resolution 88-63 to identify water bodies that are suitable for municipal use except for those that fell within the categories identified in the Resolution. Thus, the Central Valley Water Board's blanket designation through its incorporation-by-reference was specifically directed to not include water bodies that fit within the exceptions. In fact, the administrative record for the Basin Plan indicates that the Central Valley Water Board did follow this direction when it first incorporated Resolution 88-63 into the Basin Plan. However, as discussed below, the language was changed in 1994 for no specified reason or purpose.

When the Central Valley Water Board first adopted Resolution 88-63 into the Basin Plan, the language in the Implementation Chapter stated as follows: "This policy was adopted on 19 May 1988. It specifies which ground and surface waters are considered to be suitable or potentially suitable for the beneficial use of water supply (MUN). It allows the Regional Board

some discretion in making MUN determinations." (*Water Quality Control Plan for the Sacramento and San Joaquin River Basins* (2d ed., 3rd Printing, 1992) at p. IV-7, Attachment 4.) This original language clearly defers to Resolution 88-63 for determining what waters are suitable or potentially suitable for MUN. Thus, the exceptions and their implementation thereof where part of the Central Valley Water Board's incorporation of Resolution 88-63 into the Basin Plan.

Later, in 1994, the Central Valley Water Board amended the Basin Plan to include the language that currently exists and is referred to in the Tentative Permit. However, the administrative record for the 1994 amendments provides no rationale or basis for the changes made in 1994. It merely states that, "[n]ew and/or updated summary paragraphs are provided for the following: 1. State Water Board Resolution No. 88-63, Sources of Drinking Water . . . ." (See *Staff Report Amendment of the Water Quality Control Plan for Sacramento River Basin, Sacramento-San Joaquin Delta Basin, and the San Joaquin River Basin* (Staff Report) at p. 7, Attachment 5.) In the 74-page Staff Report, there is no further mention of the new language except with respect to its application to the designation of beneficial uses for groundwater. On this point, the Staff Report merely states that "[w]here a discharger chooses to seek exemption from one or more beneficial use designation based on the exception criteria, development of the case for consideration by the Regional Water Board will involve the expenditure of both private and state resources." (*Id.* at p. 28.) In its discussion with respect to "one or more" beneficial use designations, it references the fact that the 1994 amendments provided blanket designations for agricultural and industrial supply that did not previously apply to unidentified groundwater basins. The Staff Report provides no further explanation as to why the language proposed in the Implementation Chapter was proposed and for what purpose. Without support and appropriate findings, the language cannot implement a substantive change to the original language, which results in the need for a formal Basin Plan amendment where one was not previously required. Thus, the changes to the Implementation Chapter in 1994 with respect to Resolution 88-63 are invalid and cannot be used as the basis for requiring a Basin Plan amendment today.

In sum, the MUN designation is inappropriately applied to the constructed agricultural drain, Lateral No. 1, and all effluents derived from this designation are invalid. Thus, all such effluent limits should be removed.

E. Alternatively, the Central Valley Water Board Should Refrain From Adopting MUN-Based Effluent Limitations Until a Basin Plan Amendment Is Considered

At the very least, the Central Valley Water Board should refrain from adopting water quality-based effluent limitations based on the MUN beneficial use designation until after considering a Basin Plan amendment that applies the constructed agricultural drain exception to Lateral Drain No. 1. This approach would be consistent with that taken by the Central Valley Water Board when it adopted Waste Discharge Requirements for the City of Biggs. (See Order No. R5-2007-0032 (Biggs Permit), Attachment 6.)

In the Biggs Permit, the Central Valley Water Board recognizes that Lateral K (agricultural drain for Reclamation District #833) is a constructed agricultural drain that potentially falls within the exceptions of Resolution 88-63. (Biggs Permit at pp. 5, F-8.) To address this issue, the Biggs Permit requires the discharger to conduct a study and provide sufficient information to the Central Valley Water Board to process a Basin Plan amendment that would potentially remove MUN from Lateral K. (Biggs Permit at p. 30.) In the meantime, the Biggs Permit does not identify MUN as an existing use and does not include water quality-based effluent limitations on the discharge based on the MUN designation. (See Biggs Permit at pp. 9-11.)

This approach is appropriate because it allows time to process and consider a Basin Plan amendment before requiring a discharger to comply with unnecessary and inappropriate effluent limitations. In the City's case, we are in the process of completing a multi-year, multi-million dollar treatment plant upgrade that will become obsolete if the Central Valley Water Board adopts the Tentative Permit as proposed. The effluent limitations in the Tentative Permit would trigger the need for new upgrades to the not yet completed treatment facility. The City finds this to be unreasonable, and requests time to have the Central Valley Water Board consider a Basin Plan amendment for applying the appropriate exception from Resolution 88-63 to Lateral Drain No. 1. In the meantime, all effluent limitations derived from the MUN designation should be removed.

II. Receiving Water Limit for Temperature Does Not Apply to Lateral Drain No. 1

The Tentative Permit includes a receiving water limit for temperature that would require discharges from the WWTP to not cause instantaneous natural temperature to be increased by more than 5°F. Compliance with this limit would be based on the difference between temperature at RSW-001 and RSW-002. However, Lateral Drain No. 1 is a constructed agricultural drainage facility that has no natural temperature. Thus, it is inappropriate for the Tentative Permit to include this receiving water limit.

In the Vacaville Order, the State Water Board found that "[t]he Central Valley Regional Board should impose appropriate temperature controls on the Easterly treatment plant discharge after a site-specific study is completed for Old Alamo Creek and downstream waters" because Old Alamo Creek had no readily identifiable receiving water temperature. (Vacaville Order at p. 48.) In its decision, the State Water Board based its conclusion on the fact that " 'natural receiving water temperature' is defined in the Board's Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (1975) (Thermal Plan)" to mean "[t]he temperature of the receiving water at locations, depths, and times which represent conditions unaffected by any elevated temperature waste discharge or irrigation return waters." (*Ibid.*) The State Water Board then found Old Alamo Creek to be affected by irrigation return waters and that conditions unaffected by irrigation return waters were not discernible. Like Old Alamo Creek, Lateral Drain No. 1 has no readily identifiable

natural receiving water temperature and temperature in Lateral Drain No. 1 is affected by irrigation return waters.

Specifically, Lateral Drain No. 1 is an agricultural drainage facility that was constructed in the early 1900s. (See 1939 Map of RD 777, Attachment 7.) According to RD 777 staff, historical documents indicate that Lateral Drain No. 1 (and Lateral Drain No. 2) was originally constructed prior to 1917, and prior to construction was not a natural surface water with surface water flows. Still today, Lateral Drain No. 1 does not have any surface water streams, creeks, sloughs, or other natural waterways that discharge into Lateral Drain No. 1. (See Letter to Bill Lewis from Jeff Spence, RD 777 Engineer, Attachment 8.) Prior to 1939, Lateral Drain No. 1 was approximately one foot deep. (See Profile Map of Lateral Drain No. 1, Attachment 9.) It was then deepened to approximately three and four feet after 1939. Since that time, limited improvements to the drain have occurred, except for regular maintenance activities. (See Map from RD 777 Draft Master Drainage Study (June 2010), Attachment 10.) According to RD 777's Engineer, Lateral Drain No. 1 is not used nor has it ever been used to transport surface water supplies to farmers in the area. Although some farmers may utilize the drain water for irrigation, it is not an agricultural water supply facility, and functions purely as a drain. Thus, there is no natural receiving water temperature that is unaffected by irrigation return waters. Considering the specific facts with respect to Lateral Drain No. 1, it is inappropriate for the Central Valley Water Board to include the receiving water limit for temperature, as it does not apply. Thus, the limit must be removed.

III. The Effluent Limitation for Arsenic Should Be an Annual Average and the Compliance Schedule for Arsenic Should Be In the Permit

The Tentative Permit proposes to include a final water quality-based effluent limitation for arsenic as a monthly average of 10 ug/L based on the primary maximum contaminant level (MCL). The limitation for arsenic should be an annual average because the MCL is to protect people from the long-term exposure to arsenic. In fact, the Fact Sheet states that the limitation is as an annual average. Although arsenic is listed in the California Toxics Rule (CTR), it is not included in the CTR for human health, but rather for aquatic life. Here, the Central Valley Water Board proposes to adopt a water quality-based effluent limitation based on the MCL—not the CTR. Thus, the effluent limitation is not required to be adopted as a monthly limit because it is a "CTR" constituent.

Further, the arsenic limit is a new, more stringent numeric effluent limitation that is based on a water quality objective adopted after September 1995. In California, the arsenic MCL became effective on November 28, 2008. (Maximum Contaminant Levels and Regulatory Dates for Drinking Water, U.S. EPA v. California, Nov. 2008, http://www.cdph.ca.gov/certlic/drinkingwater/Documents/DWdocuments/EPAandCDPH-11-28-2008.pdf (as of Aug. 24, 2010), Attachment 11.) Thus, pursuant to the State's Compliance Schedule Policy, the City is eligible to receive an in-permit compliance schedule for compliance

with arsenic versus only protection from mandatory minimum penalties in the Cease and Desist Order.

Under the State's Compliance Schedule Policy, the Central Valley Water Board may adopt a compliance schedule that is as short as practicable but cannot exceed ten years from the date of adoption of the new, more stringent water quality objective. The City anticipates that to comply with the arsenic limitation, if Lateral Drain No. 1 is not de-designated appropriately for MUN, it will be unable to comply with the limit until 2016. This is based on the information provided in the City's Infeasibility Report, which was first provided to the Central Valley Water Board on July 19, 2010, and as revised in the August 26, 2010, version. (Attachment 12.) The City's Infeasibility Report indicates that to comply with the arsenic limits, the City will evaluate if it is more cost effective to change its point of discharge from Lateral Drain No. 1 to the Sutter Bypass, or another point of discharge, or upgrade the WWTP. In either case, the City anticipates that it will need time to evaluate data from the new treatment process, which will be complete by September 2012. Once the new treatment system is complete, the City will need at least one year of data or more to evaluate treatment capabilities of the new process, at least one year to evaluate the various options for compliance, and then at least four years to conduct environmental review, to follow Proposition 218 rate increase procedures and to implement the compliance option selected. Thus, full compliance with the arsenic water quality-based effluent limitation cannot be assured until 2016. (Letter to Bill Lewis from Eco:Logic re: Arsenic and Ammonia Compliance Project Timelines (Aug. 24, 2010), Attachment 13.)

IV. Compliance Schedule for Ammonia Must Be Extended to 2017

The Tentative Permit includes an in-permit compliance schedule for ammonia that would require full compliance by September 2015. Although the compliance deadline for ammonia in the permit is based on a statement in the City's Infeasibility Report, the ability to comply by this date is based solely on an expectation that the water quality-based effluent limitations for ammonia will be re-calculated based on a pH of 8.0. To determine if it is appropriate to calculate limitations based on 8.0 for pH, the City anticipates that it will need at least two years of data to determine how effectively ammonia is removed with the new treatment facility and to determine actual pH values in the City's discharge once the new plant is completed. Because the new facility will not be completed until 2012, reliable data will not be available until 2014. Until 2014, the City will not know if it will need to construct additional treatment plant improvements to comply with the proposed water quality-based effluent limitations. As indicated in the City's revised Infeasibility Report, it would then begin to plan improvements if necessary.

To plan for and construct improvements, the City anticipates that it would need an additional five years to conduct design, obtain funding, comply with the California Environmental Quality Act (CEQA), and construct facility improvements. Thus, full compliance with the effluent limitations as proposed is not anticipated to occur until September of 2017. (See Attachment 13.)

V. Hardness Dependent Metals

The Tentative Permit proposes to use the minimum observed upstream receiving water hardness of 30 mg/L for copper and chronic cadmium because "the receiving water at times exceeds the CTR criteria for copper and chronic cadmium." (Tentative Permit at p. F-21.) The City disagrees with the Tentative Permit's proposed approach for these metals. As explained by Robert W. Emerick, Ph.D., P.E., in the attached letter to Bill Lewis, the approach in the Tentative Permit is inconsistent with the approach put forward by the Emerick et al., 2006 study referenced in the Tentative Order (*id.* at p. F-18), and is over-protective. (Letter to Bill Lewis from Robert Emerick regarding NPDES Hardness Comments (Aug. 24, 2010), Attachment 14.) Thus, reasonable potential and effluent limitations for copper and cadmium must be reconsidered using the minimum effluent hardness of 220 mg/L (as C_a CO_3).

As a final comment, the City recommends that the Tentative Permit be re-circulated for public comment and review. There are considerable discrepancies between the Fact Sheet and the actual proposed limits. In fact, in several instances the Fact Sheet is void of any information regarding plant performance and attainability to support proposed effluent limits (e.g., iron).

Please feel free to call if you have any questions regarding this submittal.

Sincerely,

William P Lewis

William P. Lewis
Public Works Director

Attachments A, 1 thru 14
cc: Diana Messina, Central Valley RWQCB
Mike Harrison, ECO:LOGIC Engineering